



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,951	12/14/2001	Richard B. Strecker	VIA-15	7125
7590 09/17/2004				
Pandiscio & Pandiscio 470 Totten Pond Road Waltham, MA 02451-1914		EXAMINER PANTUCK, BRADFORD C		
		ART UNIT 3731 PAPER NUMBER		
DATE MAILED: 09/17/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,951

Applicant(s)

STREETER, RICHARD B.

Examiner

Bradford C Pantuck

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 12-18 and 20-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 19 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 12-18 and 20-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 1, 2004.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,692,513 to Streeter et al.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

3. Regarding Claim 1, Streeter discloses in Figure 4A a cannula (220), and coronary artery filter (260/265/250), a check valve (240/255), and an aortic filter (230). The

aortic filter (260/265/250) is certainly capable of acting as a filter, as it would allow some particles to pass through it, while blocking other larger particles. Examiner notes that one could call the filter (260/265/250) "aortic filter" and filter (230) "coronary artery filter" and the prior art would still contain all of the claimed features.

4. Regarding Claim 2, Streeter's cannula is capable of allowing an instrument to be delivered to the surgical site.
5. Regarding Claims 3 and 4, it is evident that filter (23) is a fine mesh, and coronary artery filter (260/265/250) would allow much bigger particles to pass therethrough.
6. Regarding Claims 5 and 6, "outer cuff" (235) [see Fig. 2B/4B; Column 5, lines 1-7] seals against a vascular structure/aorta [Column 1, lines 60-67].
7. Regarding Claim 7, impermeable membrane (235) extends along a longitudinal surface of the coronary artery filter (260/265/250) [Fig. 4B; Column 5, lines 1-7].
8. Regarding Claims 8 and 10, impermeable membrane (235) has a proximal end and a distal end and is orientated similarly to the cannula. The proximal end of the membrane (235) is connected to the cannula. The membrane is capable of channeling blood flow to a coronary artery.
9. Regarding Claims 9 and 11, the whole inner surface of the impermeable membrane (235) forms a conduit (pipe) so as to allow blood to flow to a coronary artery during diastole. In other words, the inner lumen of the member (135) is a conduit capable of channeling blood to a destination. It is unobstructed.
10. Regarding Claim 19, Streeter discloses in Figure 4A a cannula (220), an aortic filter (260/265/250), a check valve (240/255), and a coronary artery filter (230). The

Art Unit: 3731

aortic filter (260/265/250) is certainly capable of acting as a filter, as it would allow some particles to pass through it, while blocking other larger particles. Streeter discloses performing a procedure on the cardiac/aortic valve [Column 3 line 65 to Column 4 line 5] during diastole and systole [Column 5, lines 37-45], which means that the heart is beating during his procedure.

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

11. Claim 23 is rejected under 35 U.S.C. 102(a) as being anticipated by WO 00/44313 to Lambrecht et al. Lambrecht discloses a method for performing surgery while the heart is beating [page 5, lines 1-5; page 1 line 31- page 2 line 17], including providing apparatus having a cannula (1) and an aortic filter (70/71) [Fig. 1F; page 11, lines 24-28]. The distal end of the filter (70) is designed to dovetail with the existing aortic valve [Column 12, lines 1-10]. Lambrecht discloses deploying the device in an aorta, performing a procedure on an aortic valve [page 9, lines 15-16], and removing it from the body (it is called a “temporary filter device” [page 9, line 8]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,827,324 to Cassell et al.

U.S. Patent No. 6,375,670 to Greenhalgh

U.S. Patent No. 6,692,513 B2 to Streeter et al.

Art Unit: 3731

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradford C Pantuck whose telephone number is (703) 305-8621. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan Nguyen can be reached on (703) 308-2154. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BCP
BCP

September 13, 2004

AN
ANH TUAN T. NGUYEN
PRIMARY EXAMINER

9/15/04